

### **REMARKS**

The Office Action dated April 16, 2004, has been received and carefully noted. The amendments made herein and the following remarks are submitted as a full and complete response thereto.

Claims 16 and 17 have been amended and new claims 18 and 19 have been added. Applicant submits that the new claims as well as the amendments made herein are fully supported in the specification and the drawings as originally filed, and therefore no new matter has been added. Accordingly, claims 16-19 are pending in the present application and are respectfully submitted for consideration.

#### **Allowed Claims**

Applicant appreciates the allowance of claims 1-15.

#### **Claims 16 and 17 Recite Patentable Subject Matter**

Claims 16 and 17 were rejected under 35 U.S.C. § 102(a) as being anticipated by the instant application's disclosed prior art (hereinafter "APA"). Applicants respectfully traverse the rejection.

Claim 16 recites a signal processing circuit comprising, among other features, a loop control circuit for monitoring the filtered digital signal and the feedback signal and including an independent circuit that is independent of the decision circuit and performs a calculation with the feedback signal and the filtered digital signal, wherein the loop control circuit controls a feedback loop formed by the shift register, the feedback filter, and the independent circuit based on a monitoring result.

Claim 17 recites a feedback control method comprising, among other steps, the step of generating a loop with only the calculation signal, the waveform-equalized digital signal, and the feedback signal.

Applicant respectfully submits that APA fails to teach or suggest at least such features.

The Office Action characterizes the APA as showing “a loop control circuit 17 which monitors the output data signal and controls the switches.”

Applicant submits that the conventional signal processing circuit 10 of APA is neither comparable nor analogous to the signal processing circuit and the feedback control method of the present invention. In particular, it is submitted that APA fails to disclose at least the features of a loop control circuit that controls a feedback loop formed by a shift register, a feedback filter, and an independent circuit, which is independent of a decision circuit and performs a calculation with a feedback signal and a filtered digital signal, based on a monitoring result. Rather, APA merely discloses a loop formed by a decision signal.

To qualify as prior art under 35 U.S.C. §102, a single prior art reference must teach, i.e., identically describe, each feature of a rejected claim. As explained above, APA fails to disclose or suggest each and every feature of claims 16 and 17. Accordingly, Applicant respectfully submits that claims 16 and 17 are NOT anticipated by nor rendered obvious by the disclosure of APA. Therefore, Applicant respectfully submits that claims 16 and 17 are allowable.

Accordingly, Applicant respectfully requests withdrawal of the rejection.

### **New Claims 18 and 19 Recite Patentable Subject Matter**

New claims 18 and 19 have been added. New claim 18 recites a signal processing circuit comprising, among other features, a loop control circuit for monitoring the filtered digital signal and the feedback signal and controlling a feedback loop formed by the calculation circuit, the shift register, and the feedback filter based on a monitoring result; and new claim 19 recites a signal processing circuit comprising, among other features, a loop control circuit for monitoring the filtered digital signal and the feedback signal and including a second calculation circuit that performs a calculation with the feedback signal and the filtered digital signal and generates a second calculation signal, wherein the loop control circuit controls a feedback loop formed by the second calculation circuit, the shift register, and the feedback filter based on the second calculation signal.

As mentioned above, APA merely discloses APA merely discloses a loop formed by a decision signal and does not disclose at least the above features. Therefore, Applicant submits APA fails to disclose each and every element recited in claims 18 and 19 of the present application. Hence, claims 18 and 19 are allowable.

### **Conclusion**

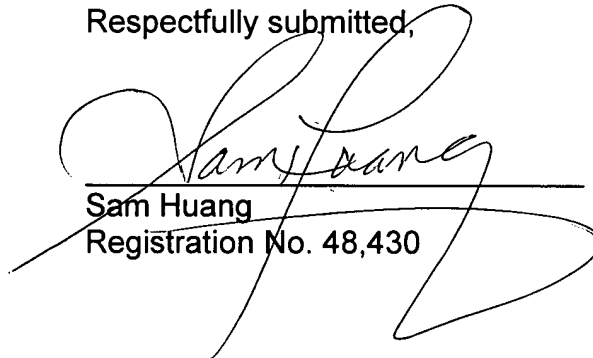
In view of the above, Applicant respectfully submits that each of claims 16-19 recites subject matter that is neither disclosed nor suggested in the cited prior art. Applicant also submits that the subject matter is more than sufficient to render the claims non-obvious to a person of ordinary skill in the art, and therefore respectfully

request that claims 16-19 be found allowable and that this application be passed to issue.

If for any reason, the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact the Applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper has not been timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300 referencing Attorney Docket No. 108075-09006.

Respectfully submitted,



Sam Huang  
Registration No. 48,430

Customer No. 004372  
ARENT FOX, PLLC  
1050 Connecticut Avenue, N.W., Suite 400  
Washington, D.C. 20036-5339  
Tel: (202) 857-6000  
Fax: (202) 638-4810

SH:grs

Enclosures: Petition for Extension of Time (2 months)  
Extra Claims Fee Transmittal